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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HEINCER, LIAM J

ART UNIT	PAPER NUMBER
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1709

MAIL DATE	DELIVERY MODE
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08/22/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/517,864

Applicant(s)

RATZSCH ET AL.

Examiner

Liam J. Heincer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-44 is/are rejected.
- 7) ☒ Claim(s) 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>3/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Claim Objections***

Claim 29 is objected to because of the following informalities: In line 2 there is a typo such that it reads "re-ehterisation" rather than "re-etherification". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 25-31, and 43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Considering Claim 25: Claim 25 recites the limitation "C₃ to C₆ alcohols" on page 9, line 5. There is insufficient antecedent basis for this limitation in the claim.

Considering Claim 43: A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949).

In the present instance, claim 43 recites the broad recitation "dispersion agent", and the claim also recites "preferably paraffin oil or engine oil" which is the narrower

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statement of the range/limitation. Claim 43 also recites the broad recitation "acid gases", and the claim also recites "preferably chlorohydrogen or sulphur dioxide" which is the narrower statement of the range/limitation. Claim 43 also recites the broad recitation "hydrocarbons", and the claim also recites "preferably hexane or heptane" which is the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 22-24 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horacek (US Pat. 5,206,066).

Considering Claims 22 and 23: Horacek teaches a amino resin molding composition (3:46-48) comprising polytriazine ethers (1:6) comprising triazine segments that have been partly etherified with alkanols/R₃ (2:7-13) and polyether diols/R₄ (2:40-42) where the triazines are combined through bridging members that are polyethers/-NH-CHR₂-O-R₄-O-CHR₂-NH- (2:40-42), or formaldehyde/-NH-CHR₂-NH- (2:7-11), wherein the molar ratio of the substituents R₃:R₄ are 20:1 to 1:20 (1:45-55), the proportion of the

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combination of the triazine segments through the polyethers is from 5 to 95 mole% (1:50-55).

Horacek doesn't teach the number of nuclei as being in the claimed range. However, the weight percentages could easily be manipulated to give the desired numbers. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have used the desired number of nuclei and the motivation to do so would have been to scale the reaction to the desired size. See MPEP § 2144.04.

Considering Claim 24: Horacek teaches the polytriazine ethers being made from a formaldehyde condensation/ $R_2=H$ (2:7-15).

Considering Claim 32: Horacek teaches the composition of claim 23 as shown above. Horacek also teaches making a laminate from the composition (3:55-57).

Claims 33, 34 and 38 are rejected 35 U.S.C. 103(a) as being unpatentable over Horacek (US Pat. 5,206,066).

Considering Claim 33: Horacek teaches a amino resin molding composition (3:46-48) comprising polytriazine ethers (1:6) comprising triazine segments that have been partly etherified with alkanols/ R_3 (2:7-13) and polyether diols/ R_4 (2:40-42) where the triazines are combined through bridging members that are polyethers/ $-NH-CHR_2-O-R_4-O-CHR_2-NH-$ (2:40-42), or formaldehyde/ $-NH-CHR_2-NH-$ (2:7-11), wherein the molar ratio of the substituents $R_3:R_4$ are 20:1 to 1:20 (1:45-55), the proportion of the combination of the triazine segments through the polyethers is from 5 to 95 mole% (1:50-55). Horacek also teaches making a resin laminate from the composition (3:55-57).

Horacek doesn't teach the number of nuclei as being in the claimed range. However, the weight percentages could easily be manipulated to give the desired numbers. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have used the desired number of nuclei and the motivation to do so would have been to scale the reaction to the desired size. See MPEP § 2144.04.

Considering Claim 34: Horacek teaches a prepeg/semi-finished product produced from fibers (3:27-32).

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Considering Claim 38: Horacek teaches fiber reinforcement that are glass, carbon or aramid fibers (3:16-20).

Claims 25, 26, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horacek (US 5,206,066) in view of Pinschmidt, Jr. et al. (US Pat. 5,519,093), Reinhardt et al. (US Pat. 3,859,334), Laganis et al. (US Pat. 4,261,873), Tsukiyama et al. (US Pat. 6,818,729), and Dorries et al. (US Pat. 4,535,031).

Considering Claim 25: Horacek teaches a process for producing an amino resin molding composition (3:46-48) comprising polytriazine ethers (1:6) comprising triazine segments that have been partly etherified with alkanols/ R_3 (2:7-13) and polyether diols/ R_4 (2:40-42) where the triazines are combined through bridging members that are polyethers/ $-NH-CHR_2-O-R_4-O-CHR_2-NH-$ (2:40-42), or formaldehyde/ $-NH-CHR_2-NH-$ (2:7-11), wherein the molar ratio of the substituents $R_3:R_4$ are 20:1 to 1:20 (1:45-55), the proportion of the combination of the triazine segments through the polyethers is from 5 to 95 mole% (1:50-55), comprising the step of etherifying triazines with formaldehyde (2:7-11) through conversion with C_1-C_8 alcohols in a weak acid medium at 20 to 150°C and atmospheric pressure (2:12-13) wherein the melt of amino triazine ethers are present in a 70 to 150 mass percent in relation to C_3 to C_6 alcohols (1:45-55), evaporating the unreacted alkanols (2:13-15); reacting the triazine derivatives with diols of the type $HO-R_4-OH$ (2:26-42), where the reaction product contains 70 mass% C_5-C_{18} alcohols (1:52-55) at 60 to 25°C and atmospheric pressure (4:47-53), wherein the triazines are present in a 20:1 to 1.1:1 ratio (1:45-55) and cured/further condensed at 140 to 220°C (3:48-54).

Horacek doesn't teach the number of nuclei as being in the claimed range. However, the weight percentages could easily be manipulated to give the desired numbers. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have used the desired number of nuclei and the motivation to do so would have been to scale the reaction to the desired size. See MPEP § 2144.04.

Horacek does not teach separating salts from the mixture. However, Pinschmidt, Jr. et al. teaches removing the salts (5:23-28) from a mixture at a pH value of 7 to 10

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(7:9-10). Horacek and Pinschmidt, Jr. et al. are combinable as they are concerned with the same field of endeavor, namely amine polymers. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have removed any salts from the mixture of Horacek as in Pinschmidt, Jr. et al., and the motivation to do so would have been, as Pinschmidt, Jr. et al. suggests, to allow the polymer to be ready to be crosslinked (5:30-31).

Horacek does not teach cooling the mixture and removing insoluble material. However, Reinhardt et al. teaches cooling a formaldehyde containing mixture to room temperature/15 to 40°C and removing the precipitate (6:24-27). Horacek and Reinhardt et al. combinable as they are concerned with the same technical difficulty, namely formaldehyde solutions. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have used the cooling step of Reinhardt et al. in the process of Horacek, and the motivation to do so would have been, as Reinhardt et al. suggests, to remove free formaldehyde form the mixture (3:45-49).

Horacek does not teach reducing the alcohol content to 5 to 20 mass percent. However, Laganis et al. teaches an aminoplast resin with 5 to 20 mass percent alcohol (16:12-13). Horacek and Laganis et al. are combinable as they are concerned with the same field of endeavor, namely aminoplast resins. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have used the alcohol content of Laganis et al. in the process of Horacek and the motivation to do so would have been, as Laganis et al. suggests, that the alcohol will act as a solvent (16:12-13).

Horacek does not teach reacting the diol and resin for the claimed time. However, Tsukiyama et al. teaches reacting a melamine resin with a diol for 1 to 60 min (4:55-59). Horacek and Tsukiyama et al. are combinable as they are concerned with the same field of endeavor, namely melamine formaldehyde resins. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have reacted the reactants for the amount of time of Tsukiyama et al. in the process of Horacek, and the motivation to do so would have been, as Tsukiyama et al. suggests, this time will produce the desired resin (4:58-59).

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Horacek does not teach the curing as taking place for 2 to 12 minutes. However, Dorries et al. teaches curing an aminoplast for 2 to 12 minutes (15:14-29). Horacek and Dorries et al. are combinable for they are concerned with the same field of endeavor, namely aminoplast resins. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have cured the resin for the time in Dorries et al. in the process of Horacek, and the motivation to do so would have been, as Dorries et al. suggests, to give a well cured product (15:18-20 and 15:26-29).

Considering Claim 26: Horacek teaches using an organic acid as a catalyst (3:11-15).

Considering Claim 30: Horacek teaches using different initial products in the condensation (2:26-42).

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Horacek (US 5,206,066) in view of Pinschmidt, Jr. et al. (US Pat. 5,519,093), Reinhardt et al. (US Pat. 3,859,334), Laganis et al. (US Pat. 4,261,873), Tsukiyama et al. (US Pat. 6,818,729), and Dorries et al. (US Pat. 4,535,031) as applied to claim 25 above, and further in view of Recker et al. (US Pat. 4,336,180) as evidenced by Kloeppel, Synthetic Molecular Sieves Binds Water Better than Zeolites.

Considering Claim 27: Horacek, Pinschmidt, Jr. et al., Reinhardt et al., Laganis et al., Tsukiyama et al., and Dorries et al. collectively teach the method of claim 25 as shown above.

Horacek does not teach adding a molecular sieve to the process. However, Recker et al. teaches forming a resin in the presence of a molecular sieve (3:18-19). Horacek and Recker et al. are combinable as they are concerned with the same field of endeavor, namely resins. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have used molecular sieving in the method of Horacek as in Recker et al., and the motivation to do so would have been, as evidenced by Kloeppel, to absorb moisture from the etherification reaction (¶2). Also, although Recker does not explicitly teach the amount of molecular sieving as being in the claimed range, it would have been obvious to a person having ordinary skill in the art at the time

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of the invention to have optimized the range to achieve the best results. See MPEP § 2144.05.

Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horacek (US 5,206,066) in view of Pinschmidt, Jr. et al. (US Pat. 5,519,093), Reinhardt et al. (US Pat. 3,859,334), Laganis et al. (US Pat. 4,261,873), Tsukiyama et al. (US Pat. 6,818,729), and Dorries et al. (US Pat. 4,535,031) as applied to claim 25 above, and further in view of D'Alelio (US Pat. 3,053,797).

Considering Claims 28 and 29: Horacek, Pinschmidt, Jr. et al., Reinhardt et al., Laganis et al., Tsukiyama et al., and Dorries et al. collectively teach the method of claim 25 as shown above.

Horacek does not teach the re-etherification as taking place at temperatures as claimed. However, D'Alelio teaches the polymerization/ re-etherification as taking place at temperatures of 100-250°C (12:55-59). Horacek and D'Alelio are combinable as they are concerned with the same field of endeavor, namely triazine polymers. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have used the temperature of D'Alelio in the method of Horacek, and the motivation to do so would have been to increase the reaction rate.

Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Horacek (US 5,206,066) in view of Pinschmidt, Jr. et al. (US Pat. 5,519,093), Reinhardt et al. (US Pat. 3,859,334), Laganis et al. (US Pat. 4,261,873), Tsukiyama et al. (US Pat. 6,818,729), and Dorries et al. (US Pat. 4,535,031) as applied to claim 25 above, and further in view of Williams, Amino Resins.

Considering Claim 31: Horacek, Pinschmidt, Jr. et al., Reinhardt et al., Laganis et al., Tsukiyama et al., and Dorries et al. collectively teach the method of claim 25 as shown above.

Horacek does not teach the process as taking place in a single reaction instillation. However, Williams teaches making an amino resin in a single unit (Section 4). Horacek and Williams are combinable as they are concerned with the same field of

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endeavor, namely amino resins. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have used a single reaction instillation in the process of Horacek as in Williams, and the motivation to do so would have been, as Williams suggests, it is a functional alternative to non continuous processes (Section 4).

Claims 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horacek (US Pat. 5,206,066) as applied to claim 33 above, and further in view of Recker et al. (US Pat. 4,336,180) as evidenced by Kloeppel, Synthetic Molecular Sieves Binds Water Better than Zeolites.

Considering Claims 35-37: Horacek teaches the product of claim 1 as stated above.

Horacek does not teach adding a molecular sieve to the product. However, Recker et al. teaches forming a resin in the presence of a molecular sieve (3:18-19). Horacek and Recker et al. are combinable as they are concerned with the same field of endeavor, namely resins. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have used molecular sieving in the product of Horacek as in Recker et al., and the motivation to do so would have been, as evidenced by Kloeppel, to absorb moisture from the etherification reaction (¶12).

Claims 39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horacek, (US Pat. 5,206,066) in view of Dorries et al. (US Pat. 4,535,031) and Goldsworthy et al. Composites, Fabrication.

Considering Claim 39: Horacek teaches a amino resin molding composition (3:46-48) comprising polytriazine ethers (1:6) comprising triazine segments that have been partly etherified with alkanols/ R_3 (2:7-13) and polyether diols/ R_4 (2:40-42) where the triazines are combined through bridging members that are polyethers/ $-NH-CHR_2-O-R_4-O-CHR_2-NH-$ (2:40-42), or formaldehyde/ $-NH-CHR_2-NH-$ (2:7-11), wherein the molar ratio of the substituents $R_3:R_4$ are 20:1 to 1:20 (1:45-55), the proportion of the combination of the triazine segments through the polyethers is from 5 to 95 mole% (1:50-55). Although the number of nuclei is not explicitly taught, the weight percentages could easily be

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manipulated to give the desired numbers. Horacek also teaches melt impregnating of fibers (3:27-32) at mass temperatures of 105 to 260°C (3:39-46). Horacek also teaches melt impregnating component blanks (3:27-32)

Horacek does not teach the curing as taking place for 2 to 12 minutes. However, Dorries et al. teaches curing an aminoplast for 2 to 12 minutes (15:14-29). Horacek and Dorries et al. are combinable for they are concerned with the same field of endeavor, namely aminoplast resins. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have cured the resin for the time in Dorries et al. in the process of Horacek, and the motivation to do so would have been, as Dorries et al. suggests, to give a well cured product (15:18-20 and 15:26-29).

Horacek does not teach the melt impregnating as being preformed according to one of the claimed techniques. However, Goldsworthy et al. teaches making a product through pultrusion (Section 3.1). Horacek and Goldsworthy et al. are combinable as they are concerned with the same field of endeavor, namely composite production. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have used the pultrusion of Goldsworthy et al. in the process of Horacek, and the motivation to do so would have been, as Goldsworthy et al. suggests, to make the articles in a one step process (Section 3.1).

Considering Claim 41: Horacek teaches the polytriazine ethers being made from a formaldehyde condensation/ $R_2=H$ (2:7-15).

Considering Claim 42: Horacek teaches using p-toluene-sulphonic acid as a hardening agent (3:11-15).

Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Horacek, (US Pat. 5,206,066) in view of Dorries et al. (US Pat. 4,535,031) and Goldsworthy et al. Composites, Fabrication. as applied to claim 39 above, and further in view of Yagi et al. (US Pat. 5,624,627), Getchell et al. (US Pat. 3,982,410) and Marco et al. (US Pat. 5,856,313).

Considering Claim 43: Horacek, Dorries et al. and Goldsworthy et al. collectively teach the process of claim 39 as claimed above.

Horacek does not teach mixing the melt with a dispersion agent. However, Yagi et al teaches mixing a resin and a paraffin oil (10:10-13) in a melt kneader at a temperature of 160 to 220°C (10:37-47). Horacek and Yagi et al. are combinable as they are concerned with the same field of endeavor, namely resin production. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have mixed a dispersion agent into the resin as in Yagi et al. in the process of Horacek, and the motivation to do so would have been, as Yagi et al. suggests, to increase the processability of the resin (1:51-64).

Horacek does not teach treating the resin with a an acid gas. However, Getchell et al. teaches treating a polymer fiber mixture with an acid gas (10:50-54). Horacek and Getchell are combinable as they are concerned with the same technical difficulty, namely impregnating fibers. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have used the acid gas of Yagi et al. in the process of Horacek, and the motivation to do so would have been, as Yagi et al. suggests, to fix the polymer in the fiber (9:47-50).

Horacek does not teach the mixture as being conveyed through a sieve separator. However, Marco et al. teaches putting a fiber through a sieve separator (2:12-16). Horacek and Marco et al. are combinable as they are concerned with the same technical difficulty, namely the manufacture of fibers. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have used the sieve separation step of Marco et al. in the process of Horacek, and the motivation to do so would have been, as Marco et al. suggests, to obtain fibers of the desired size (2:16-17).

Horacek does not teach extracting the dispersion agent. However, Yagi et al. teaches extracting a plasticizer/dispersion agent with low boiling hydrocarbons (11:10-20). It would have been obvious to a person having ordinary skill in the art at the time of the invention to have used the extraction step of Yagi et al. in the process of Horacek, and the motivation to do so would have been, as Yagi et al. suggests, to create a product of high tensile strength (3:47-60).

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Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Horacek (US 5,206,066) as applied to claim 33 above, and further in view of Goldsworthy et al. Composites, Fabrication.

Considering Claim 44: Horacek teaches the composition of claim 33 as stated above.

Horacek does not teach making a product as claimed from the composition. However, Goldworthy et al. teaches making a foamed container from a composite material (Section 3.6.3). Horacek and Goldsworthy et al. are combinable as they are concerned with the same field of endeavor, namely composite production. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have made a container from the composition of Horacek as in Goldworthy et al. and the motivation to do so would have been, as Goldworthy suggests, to give an insulated container for transportation (Section 3.6.3).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO Form 892.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liam J. Heincer whose telephone number is 571-270-3297. The examiner can normally be reached on Monday thru Friday 7:30 to 5:00 EST.

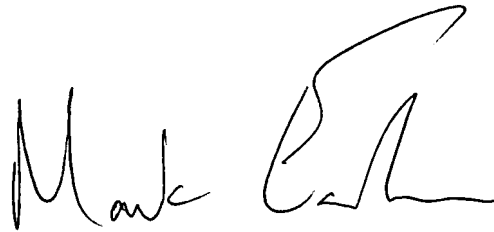
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LJH

August 13, 2007

A handwritten signature in black ink, appearing to read 'Mark Eashoo', with a stylized, sweeping flourish at the end.

MARK EASHOO, PH.D.
SUPERVISORY PATENT EXAMINER

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